Docket No. 30545-CNT4

Serial No. 10/657,436

Please amend the claims as follows:

Claims 1-38 (Canceled)

- 39. (New) A black matrix composition comprising a photopolymerizable polymer binder, a pigment, and an azo-metal complex dye dissolved or dispersed in a solvent system, said composition having a volume resistivity of greater than 10⁸ ohm-cm and an optical density of 3.0 or greater when formed into a film having a thickness of 1 micron or less.
- 40. (New) The composition of claim 39, wherein said azo-metal complex dye is an azo-1.2-chrome complex dye.
- 41. (New) The composition of claim 39, wherein said dye is present in said composition at a level of from 0.2-3.0 wt. %, based upon the total weight of pigment solids taken as 100% by weight.
- 42. (New) The composition of claim 39, wherein said pigment comprises a silica-coated metal oxide.
- 43. (New) The composition of claim 39, said composition further comprising a coupling agent.

- 44. (New) The composition of claim 43, wherein said coupling agent is a trialkoxyorganosilane coupling agent.
- 45. (New) The composition of claim 43, wherein said coupling agent is present in said composition at a level of about 5 wt. %, based upon the total weight of the pigment solids taken as 100% by weight.
 - 46. (New) The composition of claim 39, wherein said polymer binder is alkali-soluble.
- 47. (New) The composition of claim 39, said composition further comprising a photopolymerizable polyfunctional acrylate or methacrylate monomer or mixture of monomers, with each monomer having one or more ethylenically unsaturated double bond per molecule.
- 48. (New) The composition of claim 39, said composition further comprising a free-radical generating photoinitiator capable of operating effectively at exposure wavelengths of less than 400 nm.
- 49. (New) The composition of claim 48, wherein said photoinitiator comprises an amine-substituted acetophenone combined with thioxanthone and octyl N,N-dimethylaminobenzoate.

- 50. (New) The composition of claim 42, wherein said pigment comprises a metal oxide selected from the group consisting of copper oxides, manganese oxides, cobalt oxides, nickel oxides, chromium oxides, iron oxides, and mixtures thereof.
- 51. (New) The composition of claim 39, wherein said dye is selected from the group consisting of Solvent Black 27, Solvent Black 28, Solvent Black 29, and Solvent Black 45.
- 52. (New) The composition of claim 51, wherein said dye is Solvent Black 28 and is present in the composition at a level of 1 wt. %, based upon the total weight of the pigment solids taken as 100% by weight.
- 53. (New) The composition of claim 42, wherein said pigment has a primary particle size sufficient to allow filtration at resolutions small than 1 micron.
- 54. (New) The composition of claim 53, wherein said pigment particle size is from 0.01-0.02 micron, and at least 50 wt. % of the pigment particles have a primary particle size of less than 0.02 microns.
- 55. (New) The composition of claim 42, wherein said silica-coated metal oxide pigment is Pigment Black 26.

- 56. (New) A method of forming a black matrix, said method comprising the steps of: applying a quantity of a composition to a substrate so as to form a layer thereon, said composition comprising a photopolymerizable polymer binder, a pigment, and an azometal complex dye dissolved or dispersed in a solvent system; and baking said layer to yield a film having a volume resistivity of greater than 10⁸ ohm-cm and an optical density of 3.0 or greater when said film has a thickness of 1 micron or less.
- 57. (New) The method of claim 56, further including the step of exposing said baked film to energy and developing said exposed film.
- 58. (New) The method of claim 57, wherein said exposing step comprises exposing said film at 200-2,000 mJ/cm² of energy.
 - 59. (New) The combination of:
 - a substrate having a surface; and
 - a layer of a composition adjacent said substrate surface, said composition comprising a photopolymerizable polymer binder, a pigment, and an azo-metal complex dye dissolved or dispersed in a solvent system, and said composition having a volume resistivity of greater than 10⁸ ohm-cm and an optical density of 3.0 or greater when formed into a film having a thickness of 1 micron or less.

- 60. (New) The combination of claim 59, wherein said substrate is glass.
- 61. (New) The combination of:

a substrate having a surface; and

a cured film of a composition adjacent said substrate surface, said cured film;

being formed from a composition comprising a photopolymerizable polymer binder, a pigment, and an azo-metal complex dye dissolved or dispersed in a solvent system; and

having a volume resistivity of greater than 10⁸ ohm-cm and an optical density of 3.0 or greater when said film has a thickness of 1 micron or less

- 62. (New) The combination of claim 61, wherein said substrate is glass.
- 63. (New) The combination of claim 61, wherein said cured film is a black matrix.